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Briefing Report to the Chairman, Subcommittee on Defense, Committee on Appropriations, House of Representatives

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ADP BUDGET

Potential Reductions to the Department of the Navy's Budget Request

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GAO

United States
General Accounting Office
Washington, D.C. 20548

Information Management and
Technology Division

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September 18, 1989

The Honorable John P. Murtha
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

On October 19, 1988, your predecessor asked us to review the Department of Defense fiscal year 1990 budget request for automated data processing (ADP) resources to assist the Subcommittee in its budget deliberations. This report documents the information that we provided to your office in June and July 1989 on the Department of the Navy's actions related to a reduction in fiscal year 1989 operation and maintenance funds, as well as information on three automation projects managed by the Navy. This information provides background and budget data and, where appropriate, identifies funds requested for fiscal year 1990 that could be eliminated from the Navy's budget request. We will be providing separate reports to you containing similar information on selected automation projects managed by the Departments of the Army and the Air Force.

The fiscal year 1989 Department of Defense appropriations bill conference report directed the Navy to reduce its operation and maintenance funds for ADP resources by $93.1 million. We reviewed $86.6 million of this reduction and found that $50.7 million was taken from ADP resources, while $35.9 million was taken from non-ADP resources such as aircraft rework modifications, ship maintenance, and unemployment compensation. Details regarding these figures are in appendix I.

Further, our analysis of the Automation of Procurement and Accounting Data Entry project identified $2.2 million that either was not sufficiently justified or will not be needed until fiscal year 1991 because of schedule delays. In addition, we found that the Navy may not have allowed enough time to comply with test documentation requirements for part of the project (see app. II). We identified an additional $2.2 million in fiscal year 1990 funds requested for the Stock Point Logistic Integrated Communications Environment project that were not sufficiently justified (see app. III).

Finally, we identified $33.5 million in fiscal year 1990 procurement funds requested for the Stock Point ADP Replacement project that may

not be needed due to schedule delays, revised equipment cost estimates, and updated hardware requirement estimates. After we completed our evaluation of this project, the Department of Defense reduced the Navy's fiscal year 1990 procurement budget request for all computer acquisitions. Our analysis does not include an evaluation of the impact that this reduction may have on funds allocated for this project (see app. IV).

Our work was conducted between February and July 1989. As requested by your office, we did not obtain official agency comments on this report. However, we discussed its contents with Department of Defense Inspector General, Office of the Comptroller of the Department of Defense, and Department of the Navy officials and have incorporated their views where appropriate. Details regarding the objectives, scope, and methodology of our work are described in appendix V.

We are sending copies of this report to the Chairmen, House and Senate Committees on Appropriations; Chairmen, House and Senate Committees on Armed Services; Chairman, House Committee on Government Operations; Chairman, Senate Committee on Governmental Affairs; the Secretaries of Defense and the Navy; and the Director, Office of Management and Budget. We also will make copies available to others upon request.

This report was prepared under the direction of Samuel W. Bowlin, Director, Defense and Security Information Systems, who can be reached at (202) 275-4649. Other major contributors are listed in appendix VI.

Sincerely yours,

Ralph V. Carlone

Ralph V. Carlone
Assistant Comptroller General

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Abbreviations

ADP	automated data processing
APADE	Automation of Procurement and Accounting Data Entry
GAO	General Accounting Office
IMTEC	Information Management and Technology Division
NAVCOMPT	Office of the Navy Comptroller
OSD	Office of the Secretary of Defense
SPAR	Stock Point ADP Replacement
SPLICE	Stock Point Logistic Integrated Communications Environment

Navy's Fiscal Year 1989 Operation and Maintenance Budget Reduction

Background

The fiscal year 1989 Department of Defense appropriations bill conference report directed the Navy to execute a general reduction of $93.1 million in operation and maintenance automated data processing (ADP) resources. After receiving an assessment on where to make this reduction from the Naval Data Automation Command, the Navy organization responsible for reviewing the ADP program budget funding, the Office of the Navy Comptroller (NAVCOMPT) distributed the reduction to 16 Naval claimants.[1]

According to the NAVCOMPT official responsible for making this reduction, $38 million was taken from uneconomical leases, contract maintenance and Stock Point ADP Replacement installation costs, as directed by Congress; the remaining $55 million was a general reduction to operation and maintenance resources, which may or may not have been applied to ADP. This official also said that NAVCOMPT distributed the $55 million portion of the reduction by setting new budget activity funding levels for the 16 claimants. These claimants were directed to reduce operation and maintenance resource requirements to meet these new funding levels. However, the decision to take all, a portion, or none of the reduction from ADP was left to the discretion of the claimant.

Summary of Budget Reduction

After examining $86.6 million of the operation and maintenance reduction taken by 11 Naval claimants,[2] we found that about $50.7 million (59 percent) was taken from ADP resources and about $35.9 million (41 percent) was taken from other resources, such as aircraft rework modifications, ship maintenance, and unemployment compensation. According to information resource management and budget officials at these 11 claimants, the reduction was taken as shown in table II.1.

[1]The term claimant refers to a Navy office that is responsible for distributing funding to one or more commands.

[2]These 11 claimants were selected because they account for over 90 percent of the total reduction. We did not examine the following five claimants, which account for about $6.5 million of the reduction: Office of the Assistant for Administration to the Under Secretary of the Navy, Naval Facilities Engineering Command, Naval European Forces Command, Naval Telecommunications Command, and Office of the Chief of Naval Oceanography.

Table II.1: Summary of Budget Reduction

Dollars in millions

Naval claimant	NAVCOMPT distribution	Amount related to ADP resources	Amount related to other resources[a]
Office of the Chief of Naval Operations	$2 119	$1 041	$1 078
Naval Medical Command	2 154	2 154	0
Naval Air Systems Command	24 414	0	24 414
Naval Military Personnel Command	2 946	2 946	0
Naval Supply Systems Command	21 902	21 902	0
Naval Sea Systems Command	6 907	0	6 907
Strategic Systems Project Office	3 146	3 146	0
Space Warfare Systems Command	4 960	4 960	0
Commander in Chief Atlantic Fleet	8 894	8 450	444
Office of the Chief of Naval Education and Training	1 360	649	711
Commander in Chief Pacific Fleet	7 779	5 419	2 360
Total	**$86.581**	**$50.667**	**$35.914**

[a]The amount taken from other resources includes a $23 9 million reduction to aircraft rework modifications funding used for repairing and upgrading Naval aircraft as well as reductions to unemployment compensation Trident submarine mission support ship maintenance and modernization and base support services and materials required at major fleet bases and air stations which includes utility operations bachelor housing and engineering services (e g custodial services snow removal and garbage collection and disposal)

Automation of Procurement and Accounting Data Entry (APADE) Project

Background

The Navy developed APADE to improve and modernize procurement operations by automating the procurement process from requisition receipt through solicitation and contract award. The Navy estimates APADE's life cycle cost at $138 million.

APADE has four phases. Implemented in succession, each phase adds to the functions and capability of the previous phase. Phase III will have been implemented at 25 of 37 sites by the end of fiscal year 1989. Phase IV is currently being prototyped at Naval Supply Center, Charleston, South Carolina, with prototype completion scheduled for September 1989. In October 1989, the Navy is scheduled to decide whether or not to implement phase IV. The fiscal year 1990 request includes $12.9 million to implement APADE at 12 new sites and to upgrade the 25 phase III sites to phase IV capabilities between December 1989 and June 1991.

Areas of Concern

Summarized below are two budget issues related to $2.2 million and one program issue. We have included additional details on these issues in the sections that follow.

- The Navy has not adequately justified its fiscal year 1990 request for $300,000 in procurement funds to acquire hardware for 12 new sites. Also, according to the Navy's planned implementation schedule, $600,000 in operation and maintenance funds, requested for upgrades in fiscal year 1990, will not be needed until fiscal year 1991 because of schedule delays. Therefore, the Committee may wish to consider deleting these amounts from the Navy's budget request.

- The Navy will not need $1.3 million in prior years' procurement funds until fiscal year 1991. The Navy received these funds in fiscal years 1988 and 1989 to purchase hardware which, due to schedule delays, will not be ordered until fiscal year 1991. Therefore, the Committee may wish to delete these funds from the Navy's fiscal year 1990 request because this amount of prior year funds will be available to offset that request.

In general, Navy officials agreed with our analysis, but disagreed that their budget should be reduced. These officials stated that the funds will be used within the 2-year timeframe covered by the budget request and, therefore, should not be reduced. However, we believe that the funds should only be requested for the fiscal year in which they are most likely to be needed.

On a program matter, we are concerned that the Navy may not have allowed itself enough time to comply with test documentation requirements for phase IV. While the Navy's plan allows only 1 month for phase IV implementation approval, the Navy took 3 months for phase III's approval and did not comply with test documentation requirements. The Committee may wish to direct the Navy to fully comply with test documentation requirements for phase IV prior to committing funds for that purpose.

Fiscal Year 1990 Funds

The Navy's procurement request includes $300,000 to acquire hardware for 12 new phase IV sites. Navy officials stated that they based the amount requested on a percentage of the life cycle cost of installed hardware. Although Navy officials believe that they will require additional hardware in fiscal year 1990, they will not know the type or quantity of hardware until September 1989, when they complete a sizing study after prototyping. In our opinion, the Navy has not adequately supported the need for any hardware and, thus, has not supported the $300,000 APADE procurement request.

The Navy's request for the purchase of other equipment and software includes $600,000 in operation and maintenance funds that will not be needed until fiscal year 1991. APADE officials explained that these procurement funds are for electrical upgrades at new sites, and for software upgrades at most existing sites. However, some upgrades will not be implemented until fiscal year 1991. Using schedule, cost, and ordering lead time data provided by APADE officials, we computed that the Navy will not need $594,000 for six environmental upgrades and $23,000 for five software upgrades until fiscal year 1991.

Prior Fiscal Years' Funds

The Navy has $1.3 million in APADE procurement funds, received in previous fiscal years, that will not be needed until fiscal year 1991. The unneeded procurement funds cover two groups of hardware for APADE sites: APADE user items such as terminals, and computer room items such as processors.

For the APADE user items, the Navy will not need $511,000 for hardware until fiscal year 1991. The Navy received these funds through both its procurement budget and a Navy reprogramming action in fiscal year 1988. The reprogrammed funds became available when another automation program fell behind schedule. However, APADE experienced a schedule delay that extended planned hardware implementations into later

fiscal years. Consequently, the Navy does not need procurement funds for hardware that will not be ordered and implemented at the last three scheduled APADE sites until fiscal year 1991.

For the computer room items, the Navy will not need $740,000 of fiscal year 1989 procurement funds to buy hardware for APADE under the Stock Point Logistics Integrated Communications Environment contract. Based on past experience, this hardware requires a 7-month lead time between order date and site implementation. As a result, the Navy does not need procurement funds now for the last two scheduled APADE implementations because they will not be ordered until fiscal year 1991.

Phase IV Approval

APADE officials plan to get Navy approval to begin phase IV implementation in October 1989, 1 month after the prototype test's scheduled completion. Based on experience with phase III implementation approval—which took 3 months—planned approval of phase IV's implementation may be overly optimistic.

The Navy's plan for approval of phase IV implementation allows 1 month to evaluate test results, plan corrections, and document the test results in a formal report. The phase III approval took 3 months and did not include preparing documented test results in a formal test report. These test results provide the basis for the implementation decision and should have been completed prior to implementation approval. APADE officials believe phase IV to be more complex than phase III and assured us that a formal prototype test report will be prepared for phase IV. Therefore, the 1-month timeframe may not be sufficient.

Stock Point Logistic Integrated Communications Environment (SPLICE)

Background

The Navy developed SPLICE to update the existing automated supply system used at stock points and to provide improved telecommunications capability at stock points and other activities. The Navy's fiscal year 1990 budget request includes funds that would be used to upgrade SPLICE as needed to handle increased work loads or provide additional telecommunication capabilities, and to maintain the project equipment already installed. The Navy estimates the life cycle cost of the project at $290 million.

Area of Concern

The Navy has not adequately justified the need for $2.2 million in funds being requested in its fiscal year 1990 budget to upgrade the existing SPLICE system. Although we recognize there may be a need to upgrade the SPLICE system as conditions or work loads change, SPLICE project officials could not provide us with sufficient evidence to support the funds requested. Therefore, the Committee may want to reduce the Navy's fiscal year 1990 procurement request for SPLICE by $1.9 million and the operation and maintenance request by $300,000.

Request for Hardware Upgrades

The Navy's budget request includes funds for procuring disk drives and line interface units to upgrade processing capabilities at the 42 SPLICE sites that are scheduled to be installed by the end of fiscal year 1989. Also included in the budget request are site construction/modification funds for installing the upgrades.

In response to our questions about the need for the upgrade items, SPLICE project officials could not provide studies identifying needs or analyses of current work load and expected growth to justify the upgrades. SPLICE project officials initially said that they justified the upgrade by using their judgment, expertise, and experience with SPLICE. They later stated that their estimating methodology was based on aggregated needs across the system, without regard to site-specific requirements. For example, SPLICE project officials estimated that they would need 40 disk drives to upgrade SPLICE sites. They could not describe how they arrived at this number and said that they would not know site-specific requirements for disk drives until the upgrade program is executed in fiscal year 1990.

The Navy has procedures to accumulate site-specific data for estimating new and upgraded hardware needs. However, these officials did not use these procedures and did not explain why the procedures were not used. Instead, they asserted that estimating for the entire system was an acceptable means of forecasting requirements for automated data processing hardware.

Stock Point ADP Replacement (SPAR) Project

Background

The Navy is developing the $2.2 billion SPAR project to update automated information system capabilities and modernize supply management operations at stock points. Two phases are planned. Initially, in the conversion phase, the Navy will replace the existing system's hardware and will convert existing software to operate on the new hardware. Later, in the modernization phase, the Navy will substitute new software, now being developed, in place of the converted software. The Navy plans to complete development of SPAR's conversion phase software by March 1990. Development of modernization phase software is expected to be completed by June 1991.

The Office of the Secretary of Defense (OSD) is responsible for evaluating the progress of SPAR's development. The next major OSD review for SPAR should result in a decision on whether or not to implement the converted software and new hardware at additional stock points. This review is planned for early 1990.

Areas of Concern

We found that the SPAR fiscal year 1990 procurement budget request may be $33.5 million higher than required. Summarized below are our budget concerns, with details provided in the sections that follow.

- The Navy plans to order hardware for six conversion sites in fiscal year 1990. However, the Navy's plan did not consider all software conversion activities that need to be completed before requesting and receiving OSD approval to order this hardware. Allowing time to complete all conversion activities could postpone the need for ordering hardware for three sites until fiscal year 1991. Thus, the Navy will not need an estimated $26 million in procurement funds, requested in fiscal year 1990, until fiscal year 1991.

- The Navy has $7.5 million in fiscal year 1989 procurement funds that cannot be used for the purposes intended. Of this amount, $4 million results from revised hardware estimates and $3.5 million results from recomputing requirements for hardware to implement the first modernization phase site. These unused funds should be available to offset the Navy's fiscal year 1990 procurement request by $7.5 million.

After we completed our evaluation of SPAR, the Navy's fiscal year 1990 procurement budget request for the Computer Acquisition Program was reduced $35.7 million by the Department of Defense as part of its April 1989 amendments. Our analysis does not include an evaluation of the impact this reduction may have on funds allocated for SPAR.

Conversion Phase Schedule Adjustment

The Navy chose two sites to test SPAR's converted software prior to deploying the system. The first site, Naval Supply Center, Charleston, South Carolina, is scheduled to test the software in November 1989 and begin using it in December 1989. The second site, Navy Regional Data Automation Center, Pensacola, Florida, is scheduled to test the software in March 1990 and begin using it in May 1990. Testing of all required functions will not be complete until testing at the second site is completed. However, the Navy plans to ask for OSD's approval to begin deploying converted systems in the first quarter of fiscal year 1990, after only the first conversion prototype test, which covers only part of the required functions, has been completed. This approval, more appropriately, should not be requested until after the Navy has completed all of its prototype testing—that is, after May 1990 when its second prototype testing is scheduled for completion.

The Navy is requesting $42.3 million in fiscal year 1990 for hardware on which the converted SPAR software will run. If OSD approval of the converted software is delayed from first quarter fiscal year 1990 to May 1990, the Navy's planned hardware order would also be delayed. Following the progression of the Navy's hardware ordering schedule, orders for three sites after Pensacola would be placed in fiscal year 1990, and orders for three additional sites, valued by SPAR project officials at $26 million, would be extended into fiscal year 1991. Thus, $26 million of the $42.3 million the Navy is requesting in fiscal year 1990 for hardware would not be needed until the following fiscal year.

Prior Year's Funds Are Not Needed

The approved fiscal year 1989 budget includes funds to procure hardware for Pensacola at an estimated price of $11 million. Based on actual contract pricing data that became available later, this hardware, according to Navy estimates, should be priced at about $7 million. The difference, $4 million, should be available for other needs.

The fiscal year 1989 budget approved for SPAR also includes an estimated $5.1 million for procuring hardware to upgrade conversion phase hardware for modernized operations at Charleston. The Navy has recomputed its modernization needs at $1.6 million. Thus, $3.5 million is available for other needs.

Navy Proposes Budget Revisions for SPAR

In June 1989, after we completed our evaluation of SPAR, we discussed our analysis with Navy officials. These officials did not comment on our analysis. Instead, they described ongoing activities that would affect our analysis. Specifically, they stated that the Navy's budget request for the Computer Acquisition Program was reduced $35.7 million by the Department of Defense as part of its April 1989 amendments. Further, the Navy officials disclosed that, as a result of this reduction, they were planning to reduce SPAR's fiscal year 1990 procurement request by about $23 million. Essentially, while the Navy is planning for the same program activities as before, the number of conversion phase site implementations would be reduced by four sites and steps would be taken to consolidate sites.[1] This latter change would affect the way the Navy plans to use some funds provided in fiscal year 1989, adding requirements not previously considered and increasing revised procurements planned for fiscal year 1990.

If the pending Navy and Defense budget cuts become a reality, the Navy's revised budget and program actions for SPAR could eliminate our initial budget concerns that excess funds are available. These planned changes, however, were still in draft form and we could not verify them by the time we completed our budget evaluation. SPAR's revised plans had not yet been approved by the Navy and OSD by the time we completed our evaluation in June 1989. These approvals are required before SPAR project officials can proceed with their revised plans for fiscal year 1990. Therefore, the Committee may wish to require evidence of appropriate Navy and OSD approval of SPAR's revised program plans before approving the SPAR procurement request.

[1] We recommended consolidating sites to reduce program costs in a report entitled Computer Systems: Navy Needs to Assess Less Costly Ways to Implement Its Stock Point System (GAO/IMTEC-89-2, Dec. 14, 1988).

Objectives, Scope, and Methodology

Our objectives were to review the Department of the Navy's fiscal year 1990 budget request for selected general-purpose automated information systems and to provide information on these systems to the Subcommittee to assist it in determining whether or not the systems should be funded in the amounts requested. The Committee also asked us to identify the Navy resources that were affected by a $93.1 million operation and maintenance reduction that was directed by the Department of Defense appropriations conference report. We performed our work in the Washington, D.C. area and at the Fleet Material Support Office in Mechanicsburg, Pennsylvania, between February and July 1989.

To obtain budget request information, we examined the Procurement Programs (P-1) Department of Defense Budget For Fiscal Years 1990 and 1991, as well as the Department of the Navy's procurement backup book, which contains information on equipment, contracts, and schedules (including Department of Defense forms P-40 and P-22). We also examined the Department of the Navy's information technology systems budget (which contains exhibits 43A-E) and documents used to prepare both the information technology systems budget and the automated data processing portions of the Navy's procurement and operation and maintenance budgets.

We met with officials from the Naval Data Automation Command and the Office of the Navy Comptroller to obtain information on the Navy's execution of the fiscal year 1989 operation and maintenance reduction. We obtained additional detailed information from information management officials at the 11 Navy claimants that executed most of the reduction. We also met with Naval Supply Systems Command officials to obtain information on the three automated data processing projects covered in this report.

We discussed issues covered in this report with officials from the Department of Defense Office of the Inspector General, the Office of the Comptroller of the Department of Defense, the Naval Data Automation Command, and the Naval Supply Systems Command, and have incorporated their comments where appropriate. As you requested, we did not obtain official agency comments on this report. We conducted our work in accordance with generally accepted government auditing standards.

Major Contributors to This Report

Information Management and Technology Division, Washington, D.C.	James R. Watts, Associate Director John B. Stephenson, Assistant Director Nancy A. Simmons, Assignment Manager Alaine T. Ginocchio, Evaluator
Philadelphia Regional Office	Joseph A. Margallis, Evaluator-in-charge Stanley Goldman, Evaluator Victoria A. Snyder, Evaluator

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